

AMENDMENT**In the Claims:**

Please cancel claims 18 and 29 and amend claims 1, 5 and 20 as follows:

1. (amended) A polarization transformer operable to reorient polarization components of an incident optical signal, the polarization transformer comprising:

a continuously adjustable retarder operable to provide reset-free operation and continuous control of a polarization state of the optical signal; and

a limited range adjustable retarder located in optical communication with the continuously adjustable retarder and operable to provide limited-range control of the polarization state of the optical signal, wherein the limited range adjustable retarder has a first response time and the continuously adjustable retarder has a second response time, the first response time being shorter than the second response time.

5. (amended) The polarization transformer of claim 1, wherein the continuously adjustable retarder is located with respect to the limited-range adjustable retarder so as to receive the optical signal from an optical source and to transfer a transformed optical signal to the limited-range adjustable retarder.

20. (amended) A system for compensating for polarization mode dispersion in an optical signal, the system comprising:

a polarization transformer operable to reorient polarization components of an incident optical signal, the polarization transformer including:

a continuously adjustable retarder operable to provide reset-free operation and continuous control of a polarization state of the optical signal; and

a limited range adjustable retarder located in optical communication with the continuously adjustable retarder and operable to provide limited-range control of the polarization state of the optical signal, wherein the limited range adjustable retarder has a first response time and the continuously adjustable retarder has a second response time, the first response time being shorter than the second response time;

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a delay system operable to adjust the relative delay between a first reoriented polarization component of the optical signal and a second reoriented polarization component of the optical signal; and

a controller coupled to the polarization transformer and operable to provide control signals to the limited-range adjustable retarder and the continuously adjustable retarder.

Enclosed herewith is a version of claims marked up to show changes made to the previous version of the claim.